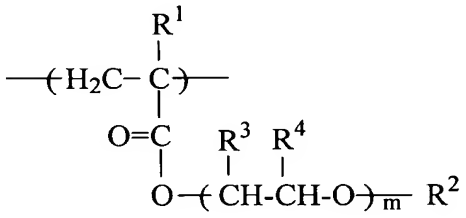
CLAIMS

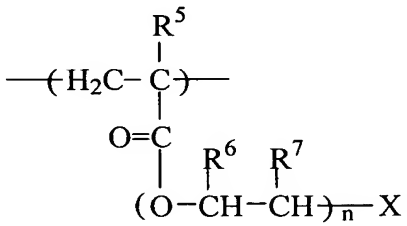
1. A process for producing a solid polymer electrolyte wherein at least components (a) and (b) below are reacted:

(a) an acrylic copolymer comprising repeating units (Structural Unit I) represented by formula (I) below and repeating units (Structural Unit II) represented by formula (II) below in a molar ratio of from 1/5 to 1,000/1 and having a number average molecular weight of from 1,000 to 1,000,000



(I)

wherein R^1 is hydrogen or an alkyl group having 1 to 5 carbon atoms, R^2 is an alkyl group having 1 to 5 carbon atoms, R^3 and R^4 are each independently hydrogen or an alkyl group having 1 to 5 carbon atoms and are the same or different from each other, and m is an integer of from 0 to 100, and



(II)

wherein R^5 is hydrogen or an alkyl group having 1 to 5 carbon atoms, R^6 and R^7 are each independently hydrogen or an alkyl group having 1 to 5 carbon atoms and are the same or different from each other, n is an integer of from 1 to 100, and X is an isocyanate or hydroxyl group; and

(b) a compound represented by formula (III)

$$Y - R^8 - Y \qquad (III)$$

wherein R^8 is a divalent hydrocarbon group having 1 to 20 carbon atoms, Y is an isocyanate or hydroxyl group provided that when X in formula (II) is an isocyanate group, Y is a hydroxyl group and that when X is a hydroxyl group, Y is an isocyante group.